



STRATEGY ANALYSIS: TECHNICAL ANALYSIS SUMMARY

Overview

During the past three years, Envision Utah has directed many activities, including an in-depth values study, baseline analysis, more than 100 public workshops, scenario development and analysis, and a million-dollar public awareness campaign. These activities culminated in the development of a regional vision called the Envision Utah Quality Growth Strategy. Envision Utah will advocate voluntary adoption of the strategy's components by public and private entities to realize the goals and strategies of the Quality Growth Strategy.

The QGET Technical Committee prepared the Technical Analysis of the Quality Growth Strategy. When compared to the baseline future (the direction we are currently headed) the Quality Growth Strategy results in many desirable attributes. In 2020, compared to the baseline, it will conserve 171 square miles of land (roughly the current size of Salt Lake City and West Valley City combined); include a more market-driven mix of housing; result in a 7.3% reduction in mobile emissions; include less traffic congestion; and require \$4.5 billion less investment in transportation, water, sewer, and utility infrastructure. These results demonstrate that by adopting the principles outlined in the Quality Growth Strategy, we can preserve the quality of life in the Greater Wasatch Area in numerous ways.

Envision Utah and QGET

Envision Utah's purpose is to create and be an advocate for a publicly supported growth strategy that will preserve Utah's high quality of life, natural environment, and economic vitality. During the past three years, Envision Utah has directed many activities, including an in depth values study,

Background

Quality Growth Planning in Utah - Quality growth planning in Utah began with the Growth Summit in 1995, a conference sponsored by legislative leadership and the Governor, intended to develop legislative solutions to the growth challenges facing the state. More than 60 proposals suggesting ways to manage the state's growth were submitted. The Summit resulted in a 10-year transportation improvement plan for the state.

The following year the Governor created the Utah Critical Lands Committee. This committee supported numerous open space projects and developed educational materials describing the tools and techniques for open space conservation.

In 1997, the State partnered with Envision Utah, a public/private community partnership dedicated to studying the effects of long-term growth, creating a publicly supported vision for the future, and advocating the strategies necessary to achieve this vision. Governor Leavitt is the Honorary Co-Chair of Envision Utah. The QGET Technical Committee was formed to improve the quality of information available to plan for Utah's future. Envision Utah and QGET have since produced the 1997 Baseline Scenario, the 1998 Alternative Scenarios Analysis and the 1999 Quality Growth Strategy.

The 1999 Utah State Legislature passed the Quality Growth Act of 1999 for the purposes of addressing growth issues throughout Utah. The Act establishes a 13-member Quality Growth Commission charged with providing assistance to local governments in the form of grant money, administering the LeRay McAllister Critical Land Conservation Fund, and researching several growth related issues.

Contributors to Technical Analysis – The QGET Technical Analysis of the Envision Utah Quality Growth Strategy benefitted from the input of: 88 cities, 10 counties, 2 metropolitan planning organizations, 5 state agencies, PSOMAS Engineering, and Fregonese Calthorpe Associates.

Limitations of Technical Analysis – The Technical Analysis of the Quality Growth Strategy is meant to provide relevant technical information to the public, decision makers and Envision Utah about the Quality Growth Strategy. It should be thought of as a work in progress. the findings of

Background - The Envision Utah Quality Growth Strategy is based on extensive input from the general public, civic organizations, business, and public officials. In January 1999, Envision Utah received more than 17,000 responses to its public survey. These responses led Envision Utah to develop six primary goals. Over the course of 1999, Envision Utah sponsored dozens of workshops to examine issues such as where and how the Greater Wasatch area should grow and what types of transportation would best serve the area. These workshops also asked participants to discuss how growth should be accommodated, and consider how well their current general plans would preserve quality of life in the face of growth pressures. Workshop participants discussed what aspects of the community should be enhanced and preserved, who could best deal with growth related issues (e.g. state government, local government, private industry, consumers) and what types of growth related strategies the public would support. Draft strategies were reviewed by the public, elected officials, and technical experts for input regarding political and technical feasibility. Finally, the Quality Growth Strategy was refined to make it consistent with forecasted housing demand. All of this information helped to refine the draft strategies that now make up Envision Utah Quality Growth Strategy.

Characteristics – The Technical Analysis of the Quality Growth Strategy is based on future-based voluntary compliance with the Envision Utah strategies. Options for voluntary compliance include: various forms of interjurisdictional cooperation, development of a market-based housing mix, additional water conservation, increasing telework, development of a region-wide transit system, and incremental changes in development patterns. The Technical Analysis anticipates that the Greater Wasatch Area will be home to approximately one million more people by 2020. Population and employment trends will continue to be consistent with current trends at the county-level.

Concept map – The concept map is a visual reflection of the information gleaned by Envision Utah from public involvement and the technical advice of local officials and the QGET Technical Committee. The map consists of six layers of information: constrained lands (steep slopes, wetlands, developed and government-owned); critical lands (open space corridors and development buffers); infrastructure (highways and transit); centers and corridors (commercial and industrial centers); newly developed lands (new land committed to urban use between 1997 and 2020); and redeveloped lands (land with existing development and low improvement values). This information was combined to create a visual map, as well as a database of geographically-

Land Use – The land use analysis is based on a market-driven housing demand forecast, extensive use of infill and reuse development, and mixed use/walkable development patterns. Under the Quality Growth Strategy, 171 square miles less land is converted to urban use than would be converted under the Baseline. This also allows for the conservation of 116 square miles of agricultural land. Under the Baseline a total of 325 square miles will be converted to urban use, compared to a total of 154 square miles under the Quality Growth Strategy. Of the total land converted to urban use, the Baseline will consume 143 square miles of agricultural land compared to 27 square miles under the Quality Growth Strategy

To ensure that the Quality Growth Strategy reflects the housing market, Envision Utah commissioned a housing demand study. The study examined current development trends, constraints that presently exist in the real estate market, and how changes in consumer preferences and regional demographics will affect housing demand in 2020. The study found that the market will predominantly demand single-family units, but to a lesser extent than current zoning ordinances and recent historical trends will supply. Changing demographics will result in some demand shifting away from single family-units (15% less of total 2020 housing compared to the current trend) toward town home/duplexes (9 percent more) and apartment/condos (5 percent more).

Transportation – The transportation system for the Quality Growth Strategy is much like the system designed for the Baseline except that the Quality Growth Strategy utilizes fewer roads and more rail transit. Transportation modeling for the Quality Growth Strategy resulted in a reduction in vehicle miles traveled of 2.4 million per day. At the same time, average speeds increased by 12.5 percent; commute times declined by 5.2 percent; and transit trips increased by 37.5 percent. These system improvements came with a reduction in road spending of approximately \$3.5 billion and an increase in transit spending of \$1.5 billion for a net savings of \$2.0 billion. Transportation experts felt that additional savings could be realized if the transportation system were further refined.

Air Quality – The Quality Growth Strategy reduced total emissions by 3.5 percent, a total of 93 tons per day. This occurs solely because of a reduction in mobile emissions of 7.3 percent. This reduction is the result of more transit trips, shorter trip times, and higher average peak speeds. It is important to note that the region has enjoyed large gains in the reduction in the quantity of air

Water - Current per capita water use in the Greater Wasatch Area is approximately 319 gallons per day. At this rate of consumption, Utah presently ranks second among state in per capita water consumption. Under the Baseline Scenario, per capita water use in 2020 is 298 gallons per person per day. The Quality Growth Strategy results in a per capita use of 267 gallon per day. The Quality Growth Strategy is an excellent forum for achieving a higher reduction/conservation in water consumption through education, incentives and/or regulation. Since the price of water is assumed to be the same in both the Baseline and the Quality Growth Strategy, per capita water use varies between these two scenarios because of changes in land use and in the conservation rate. Land use changes, such as differences in the lot size and allocation of population and employment between the Baseline and the Quality Growth Strategy, help create the lower water use under the Quality Growth Strategy.

Infrastructure – Infrastructure is computed in two categories: regional and sub-regional. Sub-regional is composed of off-site (municipal) and on-site (developer) categories of costs. Regional costs are a function of regional and state planning of activities such as major road arterials, transit networks, and large water development projects. On-site and off-site costs are infrastructure such as local roads, water and sewer mains, storm drain systems, and utilities. Compared to the baseline, the Quality Growth Strategy reduced total infrastructure cost by \$4.5 billion. This translates into a \$3.5 billion savings in both regional and sub-regional roads, approximately \$0.5 billion savings in water and an additional investment of \$1.5 billion in public transportation projects.

Summary- The technical analysis was not intended to vary significantly from the Baseline because changes in development are on an incremental and voluntary basis. The region will reap greater benefits in future time horizons since it takes more than 20 years for the benefits to be realized. The estimates provided here show that compared to the Baseline, the Quality Growth Strategy can help to preserve the quality of life in Utah by conserving critical lands, reducing mobile emissions, increasing housing choices, improving traffic flows, reducing water consumption, and requiring less infrastructure investment.

Relationship Between Envision Utah and the Quality Growth Commission

Quality growth planning in Utah includes the work of many entities, including contributions from all levels of government (federal, state, and local) and the private sector. Envision Utah and the

- ▶ *Centerville* – Proposing a mixed-use development, integrating affordable housing, open space and compact, high density development on greenfield acreage
- ▶ *Provo* – Proposing a pedestrian-oriented neighborhood node, including medium to high density housing and retail, around a key inter-modal transportation center
- ▶ *Salt Lake City* – Proposing a transit-oriented block adjacent to the new library
- ▶ *West Valley City* – Proposing a compact, mixed-use infill and redevelopment project along the Jordan River Corridor
- ▶ *Brigham City/Perry* – Proposing a compact, mixed-use, mixed-income development on greenfield acreage on the border between the two communities
- ▶ *Sandy/Midvale* – Proposing a joint planning effort to create a transit-oriented development that includes senior housing along a light rail corridor

Envision Utah and the Quality Growth Commission differ in that Envision Utah's focus is the creation of a broad, regional vision and the analysis, public education, and advocacy required to achieve this vision. The Commission is devoted to making legislative recommendations that will help local communities and the state achieve quality growth. Consequently, the Commission has a specific legislative mandate to advise legislation on growth management issues, including critical land conservation, home ownership, housing availability, and efficient infrastructure development. Envision Utah has no regulatory power, whereas the Commission is in a position to make quality growth happen through legislation.

QGET Technical Committee

State agencies

- ▶ Brad Barber, Governor's Office of Planning and Budget
- ▶ Paul Gillete, Dept. of Natural Resources (Water Resources)
- ▶ Brock LeBaron, Dept. of Environmental Quality (Air Quality)
- ▶ Richard Manser, Utah Dept. of Transportation
- ▶ Stuart Challenger, Automated Geographic Reference Center

Local government

- ▶ Mick Crandall, Chair, Wasatch Front Regional Council
- ▶ Kathy McMullen, Mountainland Association of Governments
- ▶ Wilf Sommerkorn, Davis County
- ▶ Ray Johnson, Tooele County
- ▶ Don Nay, Utah County
- ▶ John Janson, West Valley City
- ▶ Fred Aegerter, Ogden City
- ▶ Richard Hodges, Utah Transit Authority
- ▶ Doug Jex, Dept. of Community & Economic Development

Private

- ▶ Roger Borgenicht, Future Moves
- ▶ D. J. Baxter, Envision Utah